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## SEQUENCE LISTING

<110> The Trustees of the University of Pennsylvania  
 Stedman, Hansell  
 Su, Leonard  
 Mitchell, Marilyn

<120> Microtrophin and Uses Thereof

<130> UPN-Q3355PCT

<150> US 60/538,877

<151> 2004-01-23

<160> 12

<170> PatentIn version 3.3

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Page 6

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Gln Val Thr Ile Asp Ala Ile Arg Glu Val Glu Thr Leu Pro Arg Lys  
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Lys Leu Leu Asp Leu Leu Glu Gly Leu Thr Gly Thr Ser Leu Pro Lys  
Page 16



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Arg Leu Leu Asp Leu Leu Glu Gly Leu Thr Gly Gln Lys Leu Pro Lys  
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Glu Lys Gly Ser Thr Arg Val His Ala Leu Asn Asn Val Asn Lys Ala  
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Asp Ile Val Asp Gly Asn His Lys Leu Thr Leu Gly Leu Ile Trp Asn  
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Ile Ile Leu His Trp Gln Val Lys Asn Val Met Lys Asn Ile Met Ala  
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Gln Ser Thr Arg Asn Tyr Pro Gln Val Asn Val Ile Asn Phe Thr Thr  
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 Leu Leu Ser Glu Arg Leu Asn Trp Leu Glu Tyr Gln Asn Asn Ile Ile  
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 Phe Thr Asn His Phe Lys Gln Val Phe Ser Asp Val Gln Ala Arg Glu  
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 Val Tyr Ala Arg Lys Glu Ala Leu Lys Gly Gly Leu Glu Lys Thr  
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 Trp Leu Asn Leu Leu Leu Glu Tyr Gln Lys His Met Glu Thr Phe  
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 Asp Gln Asn Val Asp His Ile Thr Lys Trp Ile Ile Gln Ala Asp

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Asp Val 1715	Leu Lys Arg Leu Lys 1720	Ala Glu Leu Asn Asp 1725
Lys Val 1730	Asp Ser Thr Arg Asp 1735	Gln Ala Ala Asn Leu 1740
Arg Gly 1745	Asp His Cys Arg Lys 1750	Leu Val Glu Pro Gln 1755
Leu Asn 1760	His Arg Phe Ala Ala 1765	Ile Ser His Arg Ile 1770
Lys Ala 1775	Ser Ile Pro Leu Lys 1780	Glu Leu Glu Gln Phe 1785
Ile Gln 1790	Lys Leu Leu Glu Pro 1795	Leu Glu Ala Glu Ile 1800
Val Asn 1805	Leu Lys Glu Glu Asp 1810	Phe Asn Lys Asp Met 1815
Asn Glu 1820	Gly Thr Val Lys Glu 1825	Leu Leu Gln Arg Gly 1830
Gln Gln 1835	Arg Ile Thr Asp Glu 1840	Arg Lys Arg Glu Glu 1845
Lys Gln 1850	Gln Leu Leu Gln Thr 1855	Lys His Asn Ala Leu 1860
Arg Ser 1865	Gln Arg Arg Lys Lys 1870	Ala Leu Glu Ile Ser 1875
Tyr Gln 1880	Tyr Lys Arg Gln Ala 1885	Asp Asp Leu Leu Lys 1890
Asp Ile 1895	Glu Lys Lys Leu Ala 1900	Ser Leu Pro Glu Pro 1905
Arg Lys 1910	Ile Lys Glu Ile Asp 1915	Arg Glu Leu Gln Lys 1920
Glu Leu 1925	Asn Ala Val Arg Arg 1930	Gln Ala Glu Gly Leu 1935



Gly Ala Ala Met Ala Val Glu Pro Thr Gln Ile Gln Leu Ser Asp  
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 Arg Trp Arg Glu Ile Glu Ser Lys Phe Ala Gln Phe Arg Arg Leu  
 1955 1960 1965  
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 1970 1975 1980  
 Met Thr Glu Asp Met Pro Leu Glu Ile Ser Tyr Val Pro Ser Thr  
 1985 1990 1995  
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